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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/936,746

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Ute Griesbach

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03/29/2005

EXAMINER

MAIER, LEIGH C

ART UNIT

PAPER NUMBER

1623

DATE MAILED: 03/29/2005

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/936,746	<b>Applicant(s)</b> GRIESBACH ET AL.	
	<b>Examiner</b> Leigh C. Maier	<b>Art Unit</b> 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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## **DETAILED ACTION**

### ***Status of the Claims***

Claims 11-17 and 23 are currently amended. Claims 29-34 are newly added. Claims 11-34 are pending. Any objection or rejection not specifically repeated has been withdrawn. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

Claims 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

New claims 32-34 recite a limitation of "improved film-forming properties." However, there is no standard for comparison to determine and "improvement." The claims are thus rendered vague and indefinite.

### ***Claim Rejections - 35 USC § 103***

Claims 11-28 are again rejected under 35 U.S.C. 103(a) as being unpatentable over ZULLI et al (US 6,342,486) in view of WEITKEMPER et al (6,444,659) and JP 5-279239. Because the reference is in Japanese, the examiner is relying on the Derwent abstract to indicate its contents. New claims 29-34 are also included in this rejection.

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The claims have been amended to require a water-soluble  $\beta$ -(1,3) glucan with  $\beta$ -(1,3) side chains. New dependent claims recite “wherein all side chains exclusively consist of  $\beta$ -(1,3) glucans.” It is noted that in a backbone chain that is linked by 1,3 bonds, that the branching points must be something other than 1,3 bonds—there are no open 1- or 3-positions for branching on the chain, so there cannot be branching *and* a complete absence of bonds other than (1,3). Therefore, the claims are interpreted in such a way that the  $\beta$ -(1,3) side chains recited must refer to the bonding configuration *after the branch point*. The disclosure states that the glucans contemplated may be prepared in the manner of WO 98/30022. See page 2, lines 20-33. This claim interpretation is consistent with the products described in WO 98/30022. See page 4, lines 8-16.

Applicant’s arguments filed January 14, 2005 have been fully considered but they are not persuasive.

ZULLI teaches as set forth in previous Office actions. The reference further teaches that the cosmetic compositions comprising the disclosed glucan have utility for the treatment of aging and/or rough skin. See abstract; col 2, lines 53-55; and col 8, lines 30-67. The reference does not disclose the addition of chitosan.

Applicant contends that the Zulli reference describes a water-soluble  $\beta$ -(1,3) glucan without (poly-)glucose side-chains. The examiner respectfully disagrees with the characterization of the reference. ZULLI describes the glucan used in the invention wherein “the monomer units of which are connected by a 1,3-beta-glycosidic bond in a linear way and additionally by a 1,6 beta-glycosidic bond in a branched way ...” See col 11, lines 34-45. In this case, the reference is silent on the bonding configuration after the branch point. Since the Office does not have the

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facilities for preparing the claimed materials and comparing them with prior art inventions, the burden is on Applicant to show a novel or unobvious difference between the claimed product and the product of the prior art. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

WEITKEMPER and JP 5-279239 teach as set forth in previous Office actions.

Applicant contends that there is no motivation in WEITKEMPER to combine chitosans with  $\beta$ -glucans as in the instant claims, but Applicant does not address JP 5-279239. Applicant is reminded that the addition of chitosan is based on both of these references.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to prepare a cosmetic composition comprising the glucan disclosed by ZULLI and administer said composition for the treatment of aging and/or rough skin because of the art-disclosed utility. One of ordinary skill would be motivated to modify said composition by the addition of derivatized chitosans, known to have utility for the preparation of cosmetic compositions. The artisan would reasonably expect success in preparing and using said compositions because of the moisture-retaining properties of these chitosan derivatives.

Newly added claims 32-34 recite a limitation of “improved film-forming properties.” This limitation renders the claim indefinite, as set forth above. However, the film-forming property of any glucan is inherent. Therefore, because the claims do not recite a standard by which to make a comparison, this limitation is treated as an inherent physical property.

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Claims 11-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZULLI et al (US 6,342,486) and ENGSTAD et al (WO 95/30022) in view of WEITKEMPER et al (6,444,659) and JP 5-279239.

ZULLI teaches as set forth above. The reference further teaches that  $\beta$ -glucans, in general, are known to have utility for cosmetic preparations, but water solubility enhances their usefulness in this type of use. See col 1, lines 8-19. This is also admitted by Applicant. See the instant specification at page 1, lines 24-35. As noted above, the reference does describe the glucan products as being branched. However, it could be that either (1) the product has only a single monomer at any particular branching point; or (2) the side-chains in the product do not comprise (1,3) bonding exclusively after the branching point. If either of conditions (1) or (2) apply, this product does not meet the limitations regarding the recited  $\beta$ -glucan.

ENGSTAD teaches a soluble  $\beta$ -glucan having physical properties consistent with those of the instant claims. See page 4, lines 9-25.

WEITKEMPER and JP 5-279239 teach as set forth in previous Office actions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to prepare a cosmetic composition comprising the water-soluble glucan disclosed by ENGSTAD and administer said composition for the treatment of aging and/or rough skin. ZULLI had taught that  $\beta$ -glucans, in general, are known to have utility for cosmetic preparations, but water solubility enhances their usefulness in this type of use. Therefore, one of ordinary skill would be motivated to use any  $\beta$ -glucan, particularly a water-soluble one as taught by ENGSTAD, in cosmetics for use in treating aging skin with a reasonable expectation of

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success. The addition of chitosan and the limitation regarding improved film-forming property are addressed above.

### ***Double Patenting***

Claim 11 is again rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8 and 9 of U.S. Patent No. 6,497,865 and over claim 6 of U.S. Patent No. 6,497,863, as set forth in the previous Office action.

Applicant's arguments filed January 14, 2005 have been fully considered but they are not persuasive. Applicant argues that "amended claim 11 is divergent from the above claims because no reference is made to the  $\beta$ -(1,6) linkages" and that the "reference to the linkages is critical to the prior two patents."

Although the glucans are described in a slightly different manner, the two patents as well as the instant claims appear to be referring to the same product. As was noted in the previous Office action, the  $\beta$ -(1,3) glucans are prepared in the same manner. See '865 at the paragraph bridging col 1-2; '863 at col 2, lines 22-45; and the paragraph bridging pages 2 and 3 of the instant specification. They all use the same terminology in describing the glucan of their respective inventions.

Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Examiner's hours, phone & fax numbers*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh Maier whose telephone number is (571) 272-0656. The examiner can normally be reached on Tuesday, Thursday, and Friday 7:00 to 3:30 (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson (571) 272-0661, may be contacted. The fax number for Group 1600, Art Unit 1623 is (703) 872-9306.

Visit the U.S. PTO's site on the World Wide Web at <http://www.uspto.gov>. This site contains lots of valuable information including the latest PTO fees, downloadable forms, basic search capabilities and much more.

*Leigh C. Maier*

Leigh C. Maier  
Primary Examiner  
March 17, 2005